

THIS OPINION WAS NOT WRITTEN FOR PUBLICATION

The opinion in support of the decision being entered today (1) was not written for publication in a law journal and (2) is not binding precedent of the Board.

Paper No. 28

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

Ex parte PAUL-WERNER REINEHR, GUNTER DIETERICH,
HANS-WERNER SCHULTE, KARLHEINZ PIEL and DIRK FENGER

Appeal No. 95-4269
Application 08/123,700¹

ON BRIEF

Before CALVERT, PATE and MARTIN, Administrative Patent Judges.
CALVERT, Administrative Patent Judge.

DECISION ON APPEAL

This is an appeal from the final rejection of claims 11 to 18 and 24 to 26, all the claims remaining in the application.

Claim 24 is illustrative of the subject matter in issue:

24. A grating system with parallel strips of structural section forming air channels for an armored special-purpose vehicle, comprising: a movable frame for holding said strips; means for mounting said frame on said vehicle; and movable energy

¹ Application for patent filed September 17, 1993. According to appellants, this application is a continuation of Application 07/887,687, filed May 22, 1992, now abandoned.

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absorbing means between said vehicle and said strips for reducing breakup of material having kinetic energy on impact with said strips of structural section by absorbing a part of said kinetic energy through said energy absorbing means and resisting penetration of said material into said air channels for increasing ballistic defense of the grating system, said energy absorbing means and said frame moving upon said impact to absorb said part of said kinetic energy.

The references relied on by the examiner in the final rejection are:

Miller	3,869,165	Mar. 4, 1975
Muller	3,900,222	Aug. 19, 1975
Katsanis et al. (Katsanis)	4,727,789	Mar. 1, 1988

The claims stand finally rejected on the following grounds:

- (1) Claims 11 to 13, 16 to 18 and 24 to 26, anticipated by Katsanis, under 35 U.S.C. § 102(b).
- (2) Claim 14, unpatentable over Katsanis in view of Muller, under 35 U.S.C. § 103;
- (3) Claim 15, unpatentable over Katsanis in view of Miller, under 35 U.S.C. § 103.²

Rejection (1)

We will first consider this rejection with regard to claim 24.

In reading claim 24 on Katsanis, we agree with the examiner that Katsanis discloses a grating system for an armored vehicle

² The examiner indicates in the supplemental answer that a new ground of rejection of claims 11, 25 and 26 has been withdrawn in response to the amendment filed June 26, 1995.

(column 4, lines 27 to 35) comprising a movable frame 4" with parallel strips 4' of structural (v-shaped) cross section with air channels therebetween; means (frame 2) for mounting the frame 4" on the vehicle; and movable energy absorbing means (corrugated sheets 5, 6) between the vehicle and the strips. The corrugated sheets 5, 6 of Katsanis absorb the kinetic energy of a blast, inasmuch as the patent discloses in column 3 that the corrugations "make the shielding barrier an excellent shock absorber" (lines 35 and 36) and "provide a large flexing surface area over which the force of a blast may be spread" (lines 40 and 41).

Appellants argue in their reply brief (page 2) that movable frame 4" cannot move because it is rigidly fixed inside frame 2, and the movable connection "is only intended as a possibility for an easy installation of the shielding in a vehicle." We disagree. With a blast coming from the right-hand side of Katsanis' Figure 1, for example, the disclosed "flexing" of corrugated sheets 5 and 6 would permit strips (slats) 4' and the movable frame 4" on which they are mounted to move toward the left, with the sheets 5, 6 acting as "an excellent shock absorber" to absorb part of the kinetic energy of the blast. Moreover, as the examiner states on page 3 of the supplemental

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answer "it seems elements 3-7 [of Katsanis] will crunch together, making them movably held, upon a powerful blast."

Appellants also assert on page 2 of their reply brief that:

Due to springs which move in the sub-frame, the grill in applicant's [sic] invention offers the feature of absorbing kinetic energy and thereby minimizing the creation of fragments which can travel through the air channels. This feature is not at all available with the arrangement disclosed in the reference patent to Katsanis.

It is not apparent, however, why this feature should be present in appellants' apparatus and not in Katsanis', since the Katsanis corrugated sheets 5, 6 are disclosed as acting as "an excellent shock absorber" and appellants disclose at page 2, lines 3 to 13 of their application that the energy absorbers can be any of a wide variety of items, including "resilient compression structures" and "sundry energy absorbers." On page 2, lines 15 to 20 of their specification, appellants attribute to the use of an energy absorber

the possibility of eliminating . . . some amount of kinetic energy needed to penetrate the grating when a foreign body collides with it and hence increase ballistic defense at the same or less weight.

Since the Katsanis apparatus also employs an energy absorber 5, 6 with grating 4', we find that it would be inherently capable of performing the same functions as appellants' disclosed apparatus, including, the functions of "reducing breakup of material having

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kinetic energy on impact with said strips of structural section" and of "resisting penetration of said material into said air channels for increasing ballistic defense of the grating system," as recited in claim 24.

On pages 4 and 5 of their brief, appellants cite cases concerning hindsight, the discovery of a problem and the necessity for motivation to make changes in the reference device. However, none of these considerations is relevant to the question of anticipation under 35 U.S.C. § 102(b). See, e.g., In re Self, 671 F.2d 1344, 1350, 213 USPQ 1, 7 (CCPA 1982). The test for anticipation is whether

a single prior art reference discloses, expressly or under principles of inherency, each and every element of a claimed invention. Kalman v. Kimberly-Clark Corp., 713 F.2d 760, 772, 218 USPQ 781, 789 (Fed. Cir. 1983) [, cert. denied, 465 U.S. 1026 (1984)]. Furthermore, with an element expressed in terms of a means plus function, "absent structure [in a prior art reference] which is capable of performing the functional limitation of the 'means,' [the prior art reference] does not meet the claim." In re Mott, 557 F.2d 266, 269, 194 USPQ 305, 307 (CCPA 1977). [Emphasis added.]

RCA Corp. V. Applied Digital Data Systems, Inc., 730 F.2d 1440, 1444, 221 USPQ 385, 388 (Fed. Cir.), cert. dismissed, 468 U.S. 1228 (1984). Also, as stated in the cited Kalman case at 772, 218 USPQ at 789:

The law of anticipation does not require that the reference "teach" what the subject patent teaches.

Assuming that a reference is properly "prior art," it is only necessary that the claims under attack, as construed by the court, "read on" something disclosed in the reference, i.e., all limitations of the claim are found in the reference, or "fully met" by it.

For the reasons discussed above, we find that Katsanis discloses every element recited in claim 24, including structure capable of performing the functions of the claimed means. We therefore conclude that claim 24 is anticipated by Katsanis under 35 U.S.C. § 102(b).

Appellants state on page 2 of their brief that the rejected claims do not stand or fall together, but have presented no explanation of why any of claims 11 to 13, 16 to 18, 25 or 26 are believed to be separately patentable from claim 24. Therefore, pursuant to 37 CFR § 1.192(c)(7), those claims fall together with claim 24.

Rejection (1) will be sustained.

Rejections (2) and (3)

Claims 14 and 15 recite:

14. A grating system as defined in claim 24 wherein said energy absorbing means is operated with compressed gas.

15. A grating system as defined in claim 24 wherein said energy absorbing means comprises hydraulic means.

As secondary references in rejections (2) and (3), the examiner cites Muller and Miller, respectively, each of which discloses an impact-absorbing vehicle bumper. The bumper of

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Muller is pneumatic, containing an inflatable tube, while the Miller bumper is mounted to the vehicle frame with hydraulic shock absorbers. The examiner takes the position that in view of these references it would have been obvious to one of ordinary skill in the art to use in place of Katsanis' energy absorbing corrugated sheets 5, 6 either a gas-filled resilient deformable material (claim 14) or hydraulic shock absorbers (claim 15).

We will not sustain these rejections. Although Katsanis discloses that sheets 5, 6 act as "an excellent shock absorber" and the Muller and Miller bumpers certainly absorb shock, there is a difference between the impact of a blast and the impact of a solid object. As Katsanis states, sheets 5, 6 provide a "large flexing surface area" to spread the blast and dissipate blast forces, as well as having apertures out of alignment with each other and the other elements so that "the moving pressure wave is forced to change direction thereby redirecting some of the force of the blast" (column 3, lines 48 to 51). If Katsanis were modified as proposed by the examiner, the complexity of the structure would be increased, while at the same time the above-noted advantages of using sheets 5 and 6 would be lost. We therefore do not consider that one of ordinary skill in the art would have been motivated by the disclosures of Muller or Miller to modify the Katsanis device. Accordingly, the structure

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recited in claims 14 and 15 would not have been obvious over Katsanis in view of Muller or Miller, respectively.

Conclusion

The examiner's decision to reject claims 11 to 13, 16 to 18 and 24 to 26 under 35 U.S.C. § 102(b) is affirmed, and to reject claims 14 and 15 under 35 U.S.C. § 103 is reversed.

No time period for taking any subsequent action in connection with this appeal may be extended under 37 CFR § 1.136(a).

AFFIRMED-IN-PART

IAN A. CALVERT)	
Administrative Patent Judge)	
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WILLIAM F. PATE, III)	BOARD OF PATENT
Administrative Patent Judge)	APPEALS AND
)	INTERFERENCES
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